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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,593	07/22/2004	James Lee Uecker	ITW7510.097	4592
33647 7590 02/06/2007 ZIOLKOWSKI PATENT SOLUTIONS GROUP, SC (ITW) 136 S WISCONSIN ST PORT WASHINGTON, WI 53074			EXAMINER SHAW, CLIFFORD C	
			ART UNIT	PAPER NUMBER
			1725	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/06/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/710,593	<b>Applicant(s)</b> UECKER ET AL.	
	<b>Examiner</b> Clifford C. Shaw	<b>Art Unit</b> 1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-24 is/are allowed.
- 6) ☒ Claim(s) 1-14 and 25-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/22/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>0727</u> . | 6) <input type="checkbox"/> Other: ____  |

**Detailed Action**

1.) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.) Claims 9, 10, 13, and 25-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Hackman et al. (2,806,127). Figures 1 and 2 and the discussion at columns 3-5 in the patent to Hackman et al. (2,806,127) disclose a method with the steps claimed in claims 9, 10, and 13, including: defining a wire feed speed at element 42; operating at a reduced wire feed speed before the selected feed speed is reached as shown in figure 2; detecting arc initialization at 40; and pulling a wire from reel 12. In regard to the welding system set forth in claims 25-28, the patent to Hackman et al. (2,806,127) discloses the features claimed, including: power source 24; wire feeder associated with 16; means 38 for controlling a filler material delivery rate including a reduced rate prior to arc stabilization; detecting means 40 to detect the presence of an arc (this necessarily includes detecting arc initiation and detecting an arc when it is stable).

3.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4.) Claims 1-8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hackman et al. (2,806,127). As, discussed above, the patent to Hackman et al. (2,806,127) discloses a method with steps claimed. The claims differ in calling for an a reduction of wire feed speed for a duration based on detecting the arc and on the user selected speed. This difference does not patentably distinguish over the prior art. The graph in figure 2 of the patent to Hackman et al. (2,806,127) shows how wire feed speed ramps up from a set inch rate to the user selected speed after an arc is detected at time "E". It is considered obvious that the duration of time between "E" and the full user-set welding wire feed rate will be a function of the value of the feed rate because it will clearly take a longer period of time to accelerate to a higher set speed and a shorter period of time to accelerate to a lower set speed.

5.) Claims 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denis (3,934,110, cited by applicant). The discussion at columns 1-2 of the figure in the patent to Denis (3,934,110) discloses a method of establishing a welding arc wherein a welding wire feed

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speed is set by element "R3" and an initial run-in speed is set by element "R2". In regard to claim 14, the wire feed in Denis (3,934,110) reverses between the initial period and the arc period, thus passing through a feed speed of zero. The claims differ from the teachings of Denis (3,934,110) in specifying in claim 9 that the wire feed speed is a reduced value prior to the stabilized welding feed speed. This difference does not patentably distinguish over the prior art. It is considered obvious that the initial feed speed in Denis (3,934,110) be set to a value that is less than the welding feed speed, the motivation being the well known practice of "inching" the feed wire prior to welding, this practice alluded to in column 1, lines 15-30 of Denis (3,934,110).

6.) Claims 15-24 are allowable over the prior art of record. None of the prior art of record teaches or suggests a welding system with all of the combined features of independent claim 15, particularly the limitations associated with the acceleration and speed functions executed by the controller in the manner set forth in the claim. Dependent claims 16-24 are allowable at least because they depend from claim 15.

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Patrick J. Ryan, can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw  
Primary Examiner  
Art Unit 1725

February 1, 2007